

Remarks

Applicants thank the Examiner for the consideration shown to Applicants in extending extra effort to work with Applicants in helping with claim drafting. Applicants regret that Examiner had to base a restriction requirement on

- 5      Applicants previously adopted claim format. Applicants fully intended to submit a preliminary amendment based along the lines adopted herein but, due to an unexpectedly heavy workload, Applicants were unfortunately unable to complete the preliminary amendment before Examiner finished the present restriction requirement.

10     Applicants believe that Examiner's thorough job in the present restriction requirement will suffice to help establish the finality of the restriction.

Accordingly, Applicants have elected Group 11 (claims 4-13), drawn generally to nucleic acid, vectors and host cells encoding DC CR proteins, and kits.

15     Additionally, Applicants have canceled remaining claims 1-3 and 5-22, but request the Examiner reconsider the restriction requirement and formally confirm finality of the rejection.

20     Additionally, Applicants include some new methods claims at this time, based upon Applicants opportunity for rejoinder of method claims after allowance of elected composition claims and in accordance with MPEP §821.04 that instructs that if rejoinder is anticipated by an Applicant,

"applicants are encouraged to present such process claims. . . in the application at an early stage of prosecution."

25     Accordingly, Applicants are presenting method claims now with the intention of submitting other method claims (as indicated below in Part IV) upon allowance of the pending composition claims.

I. Status of The Application

The Examiner required a restriction to one of the single products or single methods that use only one of the single products as set forth in the 48 Groups  
30 (reproduced below).

II. The Invention

The present invention relates generally to compositions and methods of use of TECK, MIP-3 $\alpha$ , MIP-3 $\beta$ , DC CR, and M/DC CR.

### III. The Restriction Requirement

The Examiner restricted the application into the following 48 groups:

1. Claims 1(I) and portions of 2-3 (Group 1), directed generally to mouse TECK proteins, fragments, polypeptides and kits/compositions.
- 5 2. Claims 1(I) and portions of 2-3 (Group 2), directed generally to human TECK proteins, fragments, polypeptides and kits/compositions.
3. Claims 1(ii) and portions of 2-3 (Group 3), directed generally to human MIP-3 $\alpha$  proteins, fragments, polypeptides and kits/compositions.
4. Claims 1(iii) and portions of 2-3 (Group 4), directed generally to human
- 10 MIP-3 $\beta$  proteins, fragments, polypeptides and kits/compositions.
5. Claims 1(iv) and portions of 2-3 (Group 5), directed generally to human DC CR proteins, fragments, polypeptides and kits/compositions.
6. Claims 1(v) and portions of 2-3 (Group 6), directed generally to human M/DC CR proteins, fragments, polypeptides and kits/compositions.
- 15 The inventions of Groups 1-6 are classified in classes 530 and 424, subclasses 351 and 85.1.

7. Claims 4-13 (Group 7), directed generally to DNA encoding mouse TECK proteins, fragments, polypeptides, vectors, host cells and methods of making.
- 20 8. Claims 4-13 (Group 8), directed generally to DNA encoding human TECK proteins, fragments, polypeptides, vectors, host cells and methods of making.
9. Claims 4-13 (Group 9), directed generally to DNA encoding human MIP-3 $\alpha$  proteins, fragments, polypeptides, vectors, host cells and methods of making.
10. Claims 4-13 (Group 10), directed generally to DNA encoding human MIP-3 $\beta$  proteins, fragments, polypeptides, vectors, host cells and methods of making.
- 25 11. Claims 4-13 (Group 11), directed generally to DNA encoding human DC CR proteins, fragments, polypeptides, vectors, host cells and methods of making.
12. Claims 4-13 (Group 12), directed generally to DNA encoding human M/DC CR proteins, fragments, polypeptides, vectors, host cells and methods of making.
- 30 The inventions of Groups 7-12 are classified in classes 536 and 435, subclasses 23.5 and 69.5.

13. Claims 14-16 (Group 13), drawn generally to antibodies or antigen binding portions to mouse TECK and kits/compositions.
- 35 14. Claims 14-16 (Group 14), drawn generally to antibodies or antigen binding portions to human TECK and kits/compositions.

15. Claims 14-16 (Group 15), drawn generally to antibodies or antigen binding portions to human MIP-3 $\alpha$  and kits/compositions.
16. Claims 14-16 (Group 16), drawn generally to antibodies or antigen binding portions to human MIP-3 $\beta$  and kits/compositions.
- 5 17. Claims 14-16 (Group 17), drawn generally to antibodies or antigen binding portions to human DC CR and kits/compositions.
18. Claims 14-16 (Group 18), drawn generally to antibodies or antigen binding portions to human M/DC CR and kits/compositions.

The inventions of Groups 13-18 are classified in classes 530 and 424,  
10 subclasses 388.23+ and 145.1.

19. Claim 17 (Group 19), drawn generally to methods of purifying mouse TECK.
  20. Claim 17 (Group 20), drawn generally to methods of purifying human  
15 TECK.
  21. Claim 17 (Group 21), drawn generally to methods of purifying human MIP-3 $\alpha$ .
  22. Claim 17 (Group 22), drawn generally to methods of purifying human MIP-3 $\beta$ .
  - 20 23. Claim 17 (Group 23), drawn generally to methods of purifying human DC CR.
  24. Claim 17 (Group 24), drawn generally to methods of purifying human M/DC CR.
- The inventions of Groups 19-24 are classified in classes 530, subclasses 351 and  
25 412+.

25. Claim 18 (Group 25), drawn generally to making complexes with mouse TECK.
26. Claim 18 (Group 26), drawn generally to making complexes with human  
30 TECK.
27. Claim 18 (Group 27), drawn generally to making complexes with human MIP-3 $\alpha$ .
28. Claim 18 (Group 28), drawn generally to making complexes with human MIP-3 $\beta$ .
- 35 29. Claim 18 (Group 29), drawn generally to making complexes with human DC CR.

30. Claim 18 (Group 30), drawn generally to making complexes with human M/DC CR.

The inventions of Groups 25-30 are classified in classes 530 and 424, subclasses 351+ and 85.1+ respectively.

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31. Claims 19-22 (Group 31), drawn generally to methods of using agonist to mouse TECK.

32. Claims 19-22 (Group 32), drawn generally to methods of using agonist to mouse human TECK.

10 33. Claims 19-22 (Group 33), drawn generally to methods of using agonist to mouse human MIP-3 $\alpha$ .

34. Claims 19-22 (Group 34), drawn generally to methods of using agonist to mouse human MIP-3 $\beta$ .

15 35. Claims 19-22 (Group 35), drawn generally to methods of using agonist to mouse human DC CR.

36. Claims 19-22 (Group 36), drawn generally to methods of using agonist to mouse human M/DC CR.

The inventions of Groups 31-36 are classified in classes and subclasses that vary depending on the nature and make-up of the agonist and the method of modulation.

20 37. Claims 19-22 (Group 37), drawn generally to methods of using antagonist antibodies to mouse TECK.

25 38. Claims 19-22 (Group 38), drawn generally to methods of using antagonist antibodies to mouse human TECK.

39. Claims 19-22 (Group 39), drawn generally to methods of using antagonist antibodies to mouse human MIP-3 $\alpha$ .

40. Claims 19-22 (Group 40), drawn generally to methods of using antagonist antibodies to mouse human MIP-3 $\beta$ .

30 41. Claims 19-22 (Group 41), drawn generally to methods of using antagonist antibodies to mouse human DC CR.

42. Claims 19-22 (Group 42), drawn generally to methods of using antagonist antibodies to mouse human M/DC CR.

The inventions of Groups 37-42 are classified in classes and subclasses that vary depending on the nature and make-up of the antagonist and the method of modulation.

43. Claims 19-22 (Group 43), drawn generally to methods of using mouse TECK protein, peptide or mutein.
44. Claims 19-22 (Group 44), drawn generally to methods of using mouse human TECK protein, peptide or mutein.
- 5 45. Claims 19-22 (Group 45), drawn generally to methods of using mouse human MIP-3 $\alpha$  protein, peptide or mutein.
46. Claims 19-22 (Group 46), drawn generally to methods of using mouse human MIP-3 $\beta$  protein, peptide or mutein.
47. Claims 19-22 (Group 47), drawn generally to methods of using mouse 10 human DC CR protein, peptide or mutein.
48. Claims 19-22 (Group 48), drawn generally to methods of using mouse human M/DC CR protein, peptide or mutein.

The inventions of Groups 43-48 are classified in class 435 and subclass 7.1+.

15 **IV. Reply to Restriction Requirement**

Applicants provisionally elect, with traverse, Group 11 (claims 4-13), drawn generally to nucleic acid, vectors and host cells encoding human and DC CR proteins, cells and kits.

According to MPEP §821.04,

20 "if applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims which depend from or otherwise include all the limitations of the allowable product claim will be rejoined."

25 The MPEP at §821.04 further instructs that,  
"applicants are encouraged to present such process claims.  
.. in the application at an early stage of prosecution."

Accordingly, upon allowance of the presently elected claims of Group 11  
30 (claims 4-13), Applicants intention is to additionally present claims directed generally to methods of making and using the claimed DC CR polynucleotides e.g., methods of hybridization using DC CR polynucleotides; methods of detecting DC CR nucleic acid; methods of transforming a cell with DC CR polynucleotides; methods of generating a DC CR antibody using a DC CR 35 polynucleotide that expresses a DC CR polypeptide, etc.

Applicants respectfully request the Examiner state, for the record, that reconsideration of the restriction requirement would properly sustain the finality of the restriction.

Should the restriction be made final, Applicants will then address the issue of inventorship for the selected claims and amend inventorship accordingly, if necessary.

#### V. The Amendments

5 Claim 1 has been amended to advance and expedite prosecution by better placing the application in condition for allowance. Certain typographical changes have been made to ensure proper antecedent basis and consistency in terminology.

10 Claims 1-3, and 5-22 have been canceled. Cancellation of claims 1-3, and 5-  
22 neither makes nor implies, nor should it be so construed, any statement  
regarding the patentability of the subject matter of those claims. Applicants  
retain the right to prosecute the subject matter of claims 1-3, and 5-22 in a future  
application.

15 New claims 23-45 are added to more particularly point out and distinctly  
claim the instant invention.

20 Support for the amendment and new claims is throughout the specification. For example, support for the amendment to claim 1, describing an antigenic polypeptide comprising a distinct segment of contiguous amino acid residues of SEQ ID NO: 10, and new claims 23, 27, 32, 35, and 39-40, that are  
dependent from claim 1 is found at e.g., Table 4 at pages 17-18 and page 64, line 28  
bridging to page 65, line 4; new claims 26, 30, and 31 describing hybridization  
conditions for SEQ ID NO: 9 find support at, e.g., page 4, lines 20-21 and page 42,  
line 9, bridging to page 43, line 36; new claims 24, 28, 29, and 33-34 describing  
expression vectors and cells containing expression vectors find support at, e.g.,  
25 page 44, line 6 bridging to page 49, line 13; new claim 36 describing degenerate  
genetic code variants of SEQ ID NO: 9 finds support at, e.g., page 40, line 28-34;  
claim 38 describing glycosylation variants of SEQ ID NO: 10 finds support, e.g., at  
page 48, line 29 bridging to page 49, line 4; and claim 41 describing a kit finds  
support at, e.g., page 54, line 17 bridging to page 60, line 9.

30 Applicants believe that the amendments made above are fully supported  
and introduce no new matter. The new claims are attached hereto in Appendix A  
for the convenience of the Examiner. The highest number of claims previously  
paid for was 3 independent claims and 22 total claims. The newly new and added  
claims now number 3 independent claims and 24 total claims. Therefore,  
35 Applicants include authorization to charge for two additional dependent claims.  
However, should Applicants be mistaken, authorization to charge or credit the

DNAX Research Institute Deposit Account 04-1239 is provided. Applicants believe no new issues are raised in the pending claims.

Summary

- 5       Applicants believe that pending claims 4 and 23-45 clearly and patentably define the invention and respectfully request that the Examiner pass the claims to allowance at the earliest possible convenience. Should this not be appropriate, Applicants respectfully request that an interview be granted with the undersigned attorney to discuss such issues. The Examiner is invited to  
10      telephone the undersigned at (650)496-1204 to arrange for a mutually convenient time and form for the interview.

Respectfully submitted,

15      Dated: October 20, 1998

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Enclosures and attachments:

20      Appendix A: new claims

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